

[Defect Diagnosis for Semiconductor Integrated Circuits]

Abstract

A method for defect diagnosis of semiconductor chip. The method comprises the steps of (a) identifying M design structures and N physical characteristics of the circuit design, wherein M and N are positive integers, wherein each design structure of the M design structures is testable as to pass or fail, and wherein each physical characteristic of the N physical characteristics is present in at least one design structure of the M design structures; (b) for each design structure of the M design structures of the circuit design, determining a fail rate and determining whether the fail rate is high or low; and (c) if every design structure of the M design structures in which a physical characteristic of the N physical characteristics is present has a high fail rate, then flagging the physical characteristic as being likely to contain at least a defect.